

What is claimed is:

1. A method for adjusting an optical axis of a light transmission path that includes a plurality of optical components, said method comprising using an adjustment apparatus to sequentially change an optical axis of a designated single optical component or multiple optical components among said plurality of optical components in accordance with a probabilistic search technique to obtain an optimum evaluation value for light transmitted through said light transmission path.

2. A method according to claim 1, wherein said adjustment apparatus searches for an optimum value by sequentially changing the optical axis in accordance with a genetic algorithm.

3. A method according to claim 1, wherein after sequentially changing the optical axis in accordance with a genetic algorithm, said adjustment apparatus searches for an optimum value in accordance with a hill-climbing method.

4. A method according to claim 1, wherein said adjustment apparatus searches for an optimum value by sequentially changing the optical axis in accordance with a simulated annealing method.

5. A method according to claim 1, wherein optical axial coordinate values are measured while the optical axis is being changed by said adjustment apparatus, and said coordinate values are stored in a memory, each paired with an evaluation value for light transmitted through the light transmission path at that time, and of pairs of values, a pair comprised of an optical axial coordinate value paired with a largest evaluation value is taken as a local optimum solution.

6. A method according to claim 2, wherein optical axial coordinate values are measured while the optical axis is being changed by said adjustment apparatus, and said coordinate values are stored in a memory, each paired with an evaluation value for light transmitted through the light transmission path at that time, and of pairs of values, a pair comprised of an optical axial coordinate value paired with a largest evaluation value is taken as a local optimum solution.

7. A method according to claim 3, wherein optical axial coordinate values are measured while the optical axis is being changed by said adjustment apparatus, and said coordinate values are stored in a memory, each paired with an evaluation value for light transmitted through the light transmission path at that time, and of pairs of values, a pair comprised of an optical axial coordinate value paired with a largest evaluation value is taken as a local optimum solution.

8. A method according to claim 4, wherein optical axial coordinate values are measured while the optical axis is being changed

006227-12260

by said adjustment apparatus, and said coordinate values are stored in a memory, each paired with an evaluation value for light transmitted through the light transmission path at that time, and of pairs of values, a pair comprised of an optical axial coordinate value paired with a largest evaluation value is taken as a local optimum solution.

9. A method according to claim 1, wherein said adjustment apparatus uses light intensity as the evaluation value for light transmitted through the light transmission path.

10. A method according to claim 1, wherein said adjustment apparatus uses positional deviation of light as the evaluation value for light transmitted through the light transmission path.

11. A method according to claim 1, wherein said plurality of optical components include an optical fiber.

12. A method according to claim 1, wherein said plurality of optical components include an optical fiber array.

13. A method according to claim 1, wherein said plurality of optical components include a lens.

14. A method according to claim 1, wherein said plurality of optical components include a light-emitting element.

15. A method according to claim 1, wherein said plurality of optical components includes a light-receiving element.

16. A method according to claim 1, wherein said plurality of optical components include an optical waveguide.

17. A method according to claim 1, wherein said plurality of optical components include a mirror.

18. A method according to claim 1, wherein said adjustment apparatus includes an electronic computer and a recording medium that can be read by said electronic computer.

19. A storage medium in the method according to claims 18, that is recorded with an adjustment program that is executed by the electronic computer to use a probabilistic search technique to search for an optical axis of one or a plurality of optical components that provides an optimum evaluation value with respect to light transmitted through the light transmission path.

006227-ED66460